# PRIVATE OR PUBLIC SECTOR PARAMEDICS: A RECOMMENDATION FOR THE CAROL STREAM FIRE PROTECTION DISTRICT

### **EXECUTIVE LEADERSHIP**

BY: Mark A. Bodane Fire Chief Carol Stream Fire Protection District Carol Stream, IL

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### **ABSTRACT**

In 1978, the Carol Stream Fire Protection District began providing paramedic services by contracting with a private company to supply paramedic staffing for its ambulances. In 1994, the District expanded its paramedic staffing by hiring its own employees to function as paramedics in addition to the contractual personnel. The problem was that members of the Board of Trustees had questioned the continued use of contractual personnel instead of District employees.

The purpose of the research report was to review the use of the contractual personnel for paramedic ambulance service and recommend whether this type of system should continue.

An evaluative research procedure was conducted to research the problem. Research questions to be answered were:

- 1. Why was the contractual service originally established for the Fire District?
  - 2. What are the cost differences between the contractual service and Fire

    District

employees?

3. What advantages or disadvantages are identified by other fire chiefs with

contractual paramedics?

4. What advantages or disadvantages are identified by other fire chiefs with full-

time firefighter/paramedic employees?

5. Are there any National Standards applicable for the use of contractual paramedics versus fire department employees?

The procedures required the researcher to review available literature and reports on the subject, and to conduct a survey of fire departments in the Chicago metropolitan area. The findings indicated that the providing EMS service had become the source of great competition between the public and private sector. Privatization of the EMS service was often thought to be less expensive. In the Carol Stream Fire District it was determined that the cost for contractual employees was \$535,000 less per year than for District employees.

The survey revealed that fire departments who used contractual employees did so because it was less expensive and offered better control over personnel. The major problems encountered were a high rate of turnover and a limited pool of candidates to select from. Of those that used their own employees, most believed that they had better control over personnel and their own employees provided better service. The major problems encountered were the employee's desire to drop certification and the expense of maintaining the paramedic skills.

The report recommended that the Fire District further research the contractual employee turnover rate and the reasons for such turnover, study the cost differences between the contractual service and the District employees and the reasons for the difference, resurvey fire departments to study the problems noted in the original survey, and work with the local union to determine cost and efficiency issues in using District employees to provide paramedic service.

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#### INTRODUCTION

The historic objectives of the fire service have been to prevent fires, prevent loss of life and property from fire, confine fires to the place of origin, and to extinguish fires (Thorp, 1997). Today, the vast majority of fire departments also provide emergency medical services (EMS) on a routine basis. In many fire department, EMS accounts for three-fourths or more of all calls received. As a result, the fire service has become a major provider of health care services in the United States (Cote, 1997).

For many years, the Carol Stream Fire Protection District provided basic emergency medical services to the community. In 1978, as a result of a successful tax increase referendum, the Fire District began providing paramedic services by contracting with a private company to supply paramedic staffing for one ambulance.

Today, of the 61 full-time personnel in the Fire District, 12 are contractual paramedics provided by a local paramedic provider. These contractual personnel are actually employees of the private contractor, not the Fire District. The paramedics are assigned to the District's two ambulances and perform firefighting functions when needed. Contractual employees wear the Fire District uniform, comply with District policies and procedures, and are supervised by District officers.

The problem is that members of the Board of Trustees have questioned

the use of contractual personnel rather than Fire District employees. In addition, the contractual personnel have a high turnover rate, which results in a significant loss of team continuity. The unionized firefighters have also sought to replace the contractual paramedics with additional full-time firefighters trained as paramedics. The purpose of this research report is to review the use of contractual personnel for paramedic ambulance service and recommend whether this type of system should continue.

An evaluative research procedure was used to research this problem. The researcher reviewed literature on the topic obtained from the National Emergency Training Center (NETC) Learning Resource Center. In addition, a questionnaire was distributed to the entire active membership of the Metropolitan Fire Chiefs Association. The following research questions were to be answered:

- 1. Why was the contractual service originally established for the Fire District?
  - 2. What are the cost differences between the contractual service and Fire District

employees?

- 3. What advantages or disadvantages are identified by other fire chiefs with
  - contractual paramedics?
- 4. What advantages or disadvantages are identified by other fire chiefs with full-

time firefighter/paramedic employees?

5. Are there any National Standards applicable for the use of contractual paramedics versus fire department employees?

### BACKGROUND AND SIGNIFICANCE

The Carol Stream Fire Protection provides fire suppression, emergency medical,

fire prevention and public education services to an area of about 14 square miles, with a population of 44,000. The Fire District includes all of the Village of Carol Stream and the surrounding areas of unincorporated DuPage County. The Fire District is located 30 miles west of the city of Chicago. Within the Fire

District are 14 industrial parks, a number of large commercial and business centers, and several motel/hotel complexes. The Fire District currently operates from three fire stations with 61 full-time personnel and 6 part-time personnel.

About 4,000 fire and medical incidents are handled each year.

During the 1970's, many area fire departments begin providing emergency medical services at an advanced paramedic level. Prior to that time, most all departments provided a basic first aid response with any hospital transports provided by a local private ambulance service. As it became clear that the local fire departments could provide quicker ambulance service, many departments began providing more advanced training for personnel and purchased ambulances.

The Carol Stream Fire District had provided basic emergency medical service to the community for many years. Transportation to the hospital was provided by a local private ambulance service. In 1976, the Fire District decided to pursue providing paramedic service directly to the community as well as transporting patients to the hospital. As a result, the Fire District held a tax increase referendum which was to provide funds to provide paramedic service. In 1977, this referendum was approved by the District voters.

At the time that the referendum passed, the Fire District did not have a sufficient number of employees who were trained as paramedics. In order to provide the paramedic service immediately, the fire chief recommended that

the District contract with a private company to provide six individuals who were trained as firefighters as well as paramedics. These individuals would be employees of the private company, not the Fire District, but work under the direction of District supervisors. The chief also noted that the cost would be less to the District to hire a private contractor rather than to hire and train additional employees (Tokarski, 1978). The Board of Trustees approved this recommendation, and in 1978 six contractual paramedic employees began work at the District.

In 1986, the fire chief recommended that an additional six contractual employees be added in order to staff a second ambulance. No consideration was given to hiring additional District employees to provide this staffing (Tokarski, 1986). This request was approved, resulting in the number of contractual employees being increased to 12 in 1987.

During the 1991-1992 budget process, questions were raised about the why the Fire District was using contractual paramedics rather than its own employees. According to the fire chief, the use of contractual paramedics saved the taxpayers money. He noted that the cost of the contractual personnel was \$522,474 while the cost of the District using its own employees would be \$783,804 (Tokarski, 1991).

In 1994, the Fire District began construction of a new fire station to service a growing area of the community. It was determined that this station

would staff a paramedic engine without transport capabilities. It was recommended that the Fire District hire its own employees as firefighters and paramedics to staff this station. The recommendation noted that the ability to use District employees in both EMS and fire related functions would be cost effective (Bodane, 1993). That recommended was approved, and 10 new District employees were hired who were trained as paramedics.

The Fire District's 1998-1999 budget provides summary data on the costs associated with providing service with its own employees as well as contractual employees. Abstracted information details that the Fire District projected the contractual paramedic cost at \$656,781, while the same staffing with District employees would be \$1,192,320 (Bodane, 1998).

Today, the Fire District provides paramedic service from three fire stations with two ambulances and one paramedic engine. Paramedic staffing consists of 12 contractual employees and 11 Fire District employees. In addition, the Fire District intends to send additional employees through paramedic training. The need for a third ambulance is also projected within three years (Bodane, 1998).

This research report is relevant to the management process section of the National Fire Academy's *Executive Leadership* course in that it is attempting to identify a problem facing the Fire District and a possible solution that could be implemented. Which emergency services and who will provide those services to the residents of the Fire District are of great significance

### LITERATURE REVIEW

The truth is that anyone can be a provider of quality EMS. What is required is a willingness to invest the time and money to maintain quality patient care; allow employees to produce at their fullest potential; do what it takes to correct deficiencies; and adopt a system that holds the customer in the highest regard. The members of both public and private agencies receive the same training and take the same tests. In the end, you will find good and bad EMS workers in both the public and private sector. The important factor is which personnel are best motivated to reach the highest standard and perform at their highest ability (Henry, 1989). In the debate between the private and public sector regarding who should provide EMS services, there has been little if any concern for patient care. The emphasis has been on how much money could or might be saved (Brame, 1995).

The National Fire Protection Association (NFPA) is driving emergency organizations to meet the historic objectives of the fire service. However, recently the NFPA has addressed other aspects of the modern fire department organizations (Thorp, 1997). There are a number of competitive advantages of the fire service in providing EMS services. Those include the trust of the community, the limited cost due to the use of multi-role personnel, and the

ability of fire department personnel to provide prevention services to the community (Cote, 1997).

The fire service has the professionalism, education, and talent to bring the patient medical services. To do this, the fire service must start utilizing the same strategies that private EMS services do. This will help assure the public that the fire department EMS program is a more quality and cost effective way (McGaughey, 1995). However, the EMS role is sometimes viewed as a "stepchild" to the fire service. There remain firefighters who believe that EMS is a temporary assignment taken on by an organization whose job it is to fight fires (German, 1993).

Firefighters taking on a more involved EMS role require a commitment from both administrative and fire personnel. There will be long term financial needs as firefighters involved in EMS will expect additional pay. There will also be an increased potential for overtime costs as a result of continuing training (German, 1993). If the fire service is going to promote itself as professionals, then a level of inner contribution must be presented. Firefighters often say that if they are not going to be paid more money then they don't want to do EMS. That is the business side of EMS (Brame, 1995).

Fire service leaders look at fire department activities and ask if they are central to the approved mission. Many conclude with either the wrong answers or the wrong attitude (Thorp, 1997). The in-house department must abandon

bureaucratic ways of delivering services and become more innovative. Managers have had to achieve competence in financial management and forecasting and be innovative in meeting demands for efficiency and effectiveness (Martin, 1996).

There are two types of services provided by local government: core and ancillary. Ancillary services are generally considered support oriented while police and fire protection would be considered core services. It has been determined that ancillary services raise few political and policy issues than core services. The prevailing theory and experience has been that ancillary services are more open to public-private competition than are core services (Martin, 1996).

Privatization has become more attractive as an alternative by some because transforming government appears to be much more difficult than the process of contracting out. Reforming government is difficult not only due to the decision about the best way to operate services but because then those ideas must be adopted. This often requires the support of local councils, unions, and special interest groups (Brown, 1991). Many politicians have looked to privatization as a way of cutting costs. The reasons of added flexibility and responsiveness to the community are often cited. Government, it is felt, inhibits productivity and creativity in the delivery of service (Henry, 1989).

One of the greatest misconceptions of service delivery is that the private

sector is always more efficient than the public sector. In the United Kingdom, in-house departments have been awarded the majority of all public-private competitions conducted. Internal market considerations are the key to the success of the public-private competition. The willingness to buy into the process is usually determined by the degree of public employee union opposition and the level of entrepreneurial management. In the United Kingdom, public employee unions have worked with management cooperatively to restructure and reengineer service delivery systems (Martin, 1996).

There are three major advantages to contracting out services. First, competition introduced by the private sector tend to motivate organizations to lower prices and improve quality. Second, it is easier for private companies to hire, fire, promote and even out workloads of employees. Finally, private companies that operate in more than one jurisdiction can spread their expense to lower their unit costs. Even so, the evidence does not support that cost savings are guaranteed in a switch from public to private services. One of the advantages of competition by the private sector is that it encourages public employees to be more innovative and efficient. The public sector will need to improve both its efficiency or service quality or will risk being replaced (Brown, 1991).

The whole idea of competitive contracting is to allow private companies

to compete with government agencies to deliver traditional public services. What is needed is the expansion of services by the public sector to make existing services more valuable to the taxpayer (Thorp, 1997). The fire service has strengths that cannot be emulated by the private sector. The fire department can make efficient use of resources by proving training and equipment for EMS which creates more productive hours during the duty shift (Coleman, 1993).

Local government must be sure to carefully review all alternatives to contracting out. Care must be exercised to include all costs and determine if cost savings are sufficient to risk a change in service delivery. It is important not to limit consideration to cost alone (Reissman, 1997). Opponents of privatization and public-private competition often cite that such methods rarely reduce government costs. However, more than 100 studies in the last 20 years have documented cost savings (Thorp, 1997).

Local governments across the country are turning to public-private competition as a strategy to increase the efficiency, quality, and effectiveness of government service. The most common form of a public-private competition is when the in-house department competes against private sector companies (Martin, 1996). The private sector must learn to compete and maintain a competitive edge in order to remain viable. This is much different from the motivation of a public agency whose primary concern is to save its tax base or

fight for limited tax dollars (Henry, 1989).

Even if the private sector service is found to be more efficient it does not follow that privatization is a good idea. The reason why a service may be cheaper needs to be evaluated carefully. If wages and benefits of the private employee are below the levels offered by government, it must be determined if that promotes the public interest. It should not be obvious that the public interest is advanced by paying workers less or providing less benefits (Brown, 1991).

The scope of EMS is also changing. Some suggest that paramedics provide a wider range of services, including minor suturing, treatment of fevers, flu, and headaches, and administration of specific drugs and medications.

These proposed "mobile medical services" could become an additional service provided by a private ambulance service or a fire department (Cote, 1997). In order to determine the cost of providing the EMS service, every aspect should be analyzed to ensure that unanticipated expenses are not added. All new costs that a result of expansion must be appropriately calculated (Goebel, 1997).

Some of the qualities that are found in private companies include:

- Flexibility and readiness for change.
- Innovations in EMS including new ways to accomplish scheduling, training,
   and meeting patient's needs.
  - Rewarding individuals for achievement and performance rather than time

in service.

- Meeting a higher standard of excellence rather than the minimum required.
- Focus on the chosen career of EMS rather than learning dual responsibilities.

These qualities are based are the belief that if the organization is creative and innovative and provides the right environment for paramedics to operate, it is rewarded with good reputation, growth, and profit (Henry, 1989).

The public sector EMS has traditionally paid higher wages and better benefits than the private sector. Given the opportunity, individuals will go to the area where they can make the most money and receive the best benefits. If security and tradition are important to an individual, then they should enter the public sector. If an individual values the ability to create, innovate, and be rewarded for their ability rather than seniority, the private sector should be the choice (Henry, 1989).

The fire service needs to increase its public service in order to withstand a reduction in force. Leaders assuming such an approach will challenge the status quo and move the department forward while increasing the level of service. The fire service must halt the fragmentation of services by the private sector (Thorp, 1997). When a decision is made to contract out a service it usually indicates a preference for private sector service delivery. In public-private

competition, the service may be provided by either a contractor or an in-house department. The in-house department must be willing and able to compete in order to provide the service (Martin, 1996).

To allow for better competition with the private sector, unions will have to become more flexible with government. Overall, both labor and management will need to take a partnership approach rather than adversarial posturing. In the end, the inefficiency of municipal services is not because of bad elected officials, managers, workers, or unions. It is a natural problem of a monopoly system (Reissman, 1997). The private sector EMS managers often point to the 24 hour level of staffing as the heart of the fire department management problem. The issue is that there is no need for identical coverage every hour of the day, every day of the week. The private sector is able to identify peak load staffing to better match demand with supply (Coleman, 1993).

The concept of privatization is feared by public sector employees who obviously value their employment above all else (Thorp, 1997). The union's level of support seems to depend on what the competitive strategies are. When the strategies do not call for reducing salary, wage and benefits scales, unions are more likely to participate. In the end, managers must be able to negotiate with unions to change the local government conditions of employment, turn departments into profitable business units, and to keep their fingers on the

business trends and what the competition is doing (Martin, 1996).

## **Summary**

Providing EMS services has become the source of competition between the private and public agencies. Often times, the fire departments find that providing EMS service is vital to maintain the department's existence. By providing EMS, departments increase their value to the community. Most professionals seem to agree that the competition does result in a more carefully analysis of service delivery methods and costs by fire departments.

It is evident that fire departments must carefully evaluate the services offered to the community and research how these may be improved. It seems to be logical that multi-functioning personnel, who can provide both firefighting and medical services are more cost effective. Overall, however, the analysis should not be focused on cost alone.

The researcher believes that fire departments will need to individually determine which services are needed and how to provide them. Reviewing private sector practices and methods and tracking their trends should assist the fire department in being competitive.

### **PROCEDURES**

The research procedure used in this report consisted of a literature review that was conducted at the National Emergency Training Center Learning Resource Center in July, 1998.

A literature review was also conducted at the Carol Stream Fire Protection District Resource

Library in the following months. During this same time period, a survey of area fire departments

and districts was undertaken regarding the use of paramedic personnel.

The survey was conducted to determine the types of employment or cost issues identified by other fire departments that have either contractual paramedic employees or their own employees. The results of the survey could be compared with the Fire District's current experience as well as identifying issues that require further study before any recommendations are offered.

The survey instrument consisted of six questions. The first question asked how many of the fire department's employees are paramedics. The second question asked how many paramedic personnel are contractual personnel of a private company. The third question asked the respondent to indicate why a private company was contracted to provide some or all of the service. The fourth question asked for the respondent to indicate the types of problems encountered with contractual personnel. The fifth question asked the respondent to offer reasons why the department had its own employees function as paramedics rather than contractual employees, while the sixth question asked about problem with their own employees. The survey instrument is contained in Appendix A.

The survey instrument was piloted-tested by administering it to four fire chiefs in neighboring communities. The pilot-tested fire chiefs indicated that the survey format was easily followed and that the meaning of each question was clear. Based on this finding, no changes were made in the instrumentation.

The researcher obtained the mailing addresses of the 119 active members of the Metropolitan Fire Chiefs Association. Each member was mailed a survey questionnaire and asked to return it by FAX or mail. There were 72 surveys returned to the researcher.

Appendix B details the demographic information of the respondents.

### **Project Limitations**

The method upon which departments were selected to receive the survey was a major limiting factor in this research. By limiting the survey to those who were members of the Fire Chiefs Association, it is possible that a number of similar sized fire departments did not have an opportunity to participate.

## **Definition of Terms**

<u>Paramedic Engine</u>. This term refers to a fire pumper/engine which also carries the same paramedic equipment as a paramedic ambulance. The paramedic engine has a minimum staff of one paramedic and two emergency medical technicians- basic.

<u>Contractual Employee</u>. This term refers to an individual that works at a fire department under the department's supervision but is actually an employee of a private contractor.

### RESULTS

The results of this research project are from the literature review and from the survey instrument that was distributed to area fire departments. The main goal was to

answer the research questions as outlined in the Introduction.

## **Research Question 1**

Why was the contractual service originally established for the Fire District?

When the need for the staffing and paramedics was identified and funding approved by the Fire District voters, there were an insufficient number of Fire District employees trained as paramedics. A private company in the area offered a service whereby it would provide the number of personnel needed to the fire department, but those personnel would remain employees of the private company. This would allow the District to begin service immediately, rather than be required to hire and train its own employees. In addition, it was considered to be less expensive to have the private contractor provide the needed personnel rather than the Fire District hire its own employees.

### **Research Question 2**

What are the cost differences between the contractual service and Fire

# District employees?

In 1991, the cost difference between having contractual paramedics versus hiring District employees was estimated at \$522,474 for contractual compared to \$783,804 for employees. This represented a difference of \$261,330, or a 50% increase in costs to hire District employees.

According to information from the 1997/98 Fire District budget, the projected cost for the contractual employees was \$656,781, while providing the required number of District employees would cost \$1,192,320. This represents a difference of \$535,539, or a 81.5% increase in costs to hire District employees.

### **Research Question 3**

# What advantages or disadvantages are identified by other fire chiefs with

## contractual paramedics?

Of the 72 survey responses, 46% of the fire departments had either all contractual paramedics or a combination of their own employees and contractual employees. Appendix C details the analysis of the responses from these departments.

The responses to why they used a private service indicated that 85% believed a private company was less expensive, 67% believed they had better control over personnel for hiring, discipline, and work hours, 15% due to it always being done that way, 9% believed a private company can provide better service, and 3% had never consider hiring their own employees. In addition, 12% of the respondents offered the reason that there are no additional costs with the private service.

The survey responses to the problems encountered with the private

service indicated that 76% felt the turnover rate was high, 21% had difficulties with the pool of candidates, 12% had instances of low firefighting or physical abilities, with no respondents with problems with quality of skills. In addition, 9% of the departments offered the reason that there are ongoing labor issues with using contractual paramedics.

### **Research Question 4**

# What advantages or disadvantages are identified by other fire chiefs with

## full-time firefighter/paramedic employees?

Of the 72 survey responses, 69% of the fire departments had some or all of their own employees providing paramedic services. Appendix D details the analysis of the responses from these departments.

The responses to why they used their own employees to provide paramedic service indicated that 56% believed they had better control over their own personnel for hiring, discipline, and work hours, 54% believed their own employees can provide better service, 50% due to it always being done that way, 22% had never considered hiring a contractual service, and 16% indicated that a private service is prohibited by union contract. In addition, 24% of the respondents offered the reason that their own employees can be multi functional in various areas.

The survey responses to the issues encountered with their own employees as paramedics indicated that 56% had problems due to the employees desire to drop paramedic certification, 48% with the expense of maintaining skills, 30% had problems with rotating personnel from the engine to the ambulance, and 4% with the number of paramedics and the number of calls needed to maintain skills

## **Research Question 5**

# Are there any National Standards applicable for the use of contractual

## paramedics versus fire department employees?

The National Fire Protection Association primarily provides recommendations on

the organization, staffing, training, and operation of the fire department from a

firefighting standpoint. Other agencies provide training requirements for the delivery of

emergency medical services. Currently, there are no National Standards on the whether

fire departments should use their own employees or contractual personnel to provide

services.

### DISCUSSION

The results of the literature review indicated that both public and private agencies can provide quality EMS. The fire service approach to EMS is not always because it can do a better job, but because it is a way to justify or increase staffing levels. As the fire service continues to try to expand its scope of service, competition with the private sector ensues.

The issue of privatization is often raised as a method to reduce costs. As indicated by Reissman (1997) and Brown (1991), many services, however, should not be judged on cost alone. The survey results showed that 85% of the fire departments using contractual paramedics did so because costs were lower, and 67% because there was better control of personnel for hiring, discipline, and work hours. Only 9% believed that a private company could provide better service than their own employees.

While the expense of providing services should always be a factor, the primary issue should be how to provide the best service from a cost/benefit analysis. The researcher believes that a review of privatization should present opportunities to the fire departments rather than always a threat. How a private company operates and its cost of operation should be studied by fire departments and ideas adopted. This is a common practice for departments to adopt or use ideas from other departments. Using methods of the private sector, or at least understanding them, would probably result in improving some of the services provided by the public sector. As McGaughey (1995) pointed out, using some of the strategies of the private services will help the public service be more effective.

As Brown (1991) indicated, the issue of why a private sector service may be cheaper must be evaluated. In the case of the Fire District, there is an estimated \$500,000 per year savings in using contractual employees rather than District employees. Additional study is needed to determine all of the factors that result is this difference. If the reason found is solely because of less salary costs, Brown (1991) questions whether the public interest is served by providing less pay and benefits.

A common issue raised in the Fire District is the high rate of turnover in contractual employees. According to the survey, 76% of the fire departments with contractual employees believed that the turnover rate was too high. As Henry (1989) noted, public sector EMS has generally provided higher wages and benefits, and many of the private company employees will move to the public sector given the opportunity. Additional study is needed at the Fire District to determine actual turnover rates and the reasons contractual employees leave the District. Another factor that requires study is the impact of a high turnover rate in both costs and service delivery.

McGaughey (1995) believes that the fire service has the ability and professionalism to provide EMS services. The survey results of fire departments having their own paramedic employees indicated that 56% believed they had better control over their own personnel and 54% indicating that their employees could provide better service. Of note is that 24% of the survey respondents provided the comment that their own employees are multi

functional in various fire service disciplines. This multi function ability is one reason the Fire District hired its own employees to be paramedics in 1994, instead of expanding the contractual employee staff.

Problems noted by fire departments with their own employees as paramedics included a desire to drop paramedic certification (56%), and the expense of maintaining skills and training (48%). This would seem to relate to Brame (1995) comments regarding the need for the fire service members to promote themselves as professionals and present a level of inner contribution. The fire service must realize it cannot strive to gain or maintain EMS service with personnel who don't what to become paramedics or continue training, or with a cost that is prohibitive.

### RECOMMENDATIONS

The issue of who should provided paramedics services for the Carol Stream Fire District is a complicated one. Based on cost alone, the contractual service may be more appealing. Yet from the both the literature review and the study results, it is not clear that this should be the deciding factor. Therefore, the researcher makes the following recommendations:

1. Conduct a Fire District study of the turnover rate for the contractual employees over the last 20 years. If possible, include the reasons why the contractual employees left.

- 2. Analyze the cost differences between the contractual service and District employees to determine the reasons for such a substantial difference.
- 3. Resurvey fire departments to study the implications of the problems noted in the survey with both contractual and own employees as paramedics. Include those who do not have those problems to determine how they are avoided.
- 4. Work with the Fire District local union to determine if aspects of a public-private competition would reduce costs and improve efficiency of providing EMS services with District employees.

The researcher would recommend that other fire departments interested in conducting this research study the value of the multi function aspect of having firefighters functioning as paramedics. In particular, does the numerous specialized firefighting and rescue functions assumed by firefighters and the expansion of the paramedic training result in a overwhelmed or potentially "burned out" employee? Is there a limit to how many levels of expertise can be effectively and efficiently maintained by employees?

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# APPENDIX A

# NATIONAL FIRE ACADEMY EXECUTIVE FIRE OFFICER PROGRAM APPLIED RESEARCH PROJECT

# PARAMEDIC SURVEY

Fire I	Department/District Name
Perso	on Completing Survey
1. Ho	ow many of your full-time employees are paramedics?
	ow many full-time paramedic personnel are contractual employees of a te company?
	applicable, why do you have private company provide some or all of your medic staff? (Please check all that apply)
[]	Always the way it has been done.
[]	Never have considered hiring more of our own personnel.
[]	Less expensive for contract service.
[]	Private company employees can provide better service.
[] etc.	Better control over contract personnel for hiring, discipline, work hours,
[]	Other:

	applicable, what types of problems have you encountered with contractual medics? (Please check all that apply)
[]	High turnover rate.
[]	Low quality of skills.
[]	Low firefighting or physical abilities
[]	Small pool of candidates to select from.
[]	Other:
rath	applicable, why do you have your own employees function as paramedics er than having a private company provide all your paramedic staff? (Please k all that apply)
[]	Always the way it has been done.
[]	Never have considered a private company.
[]	Private service prohibited by union contract.
[]	Own employees can provide better service.
[]	Better control over personnel since they are our employees.
[]	Other:

	applicable, what types of problems have you encountered with having your employees as paramedics? (Please check all that apply)
[]	Desire to drop paramedic certification.
[]	Rotation from engine to ambulance.
[]	Expense of maintaining skills
[]	Number of paramedics vs. enough EMS calls to maintain skills
[]	Other:

# APPENDIX B

# DEMOGRAPHIC CHARACTERISTICS

<u>Percent</u>	<u>nts</u>	
Departments that have only employees trained as a paramedics 54%	39	
Departments that have only contractual paramedics 31%	22	
Departments that have both employee and contractual paramedics $15\%$	11	
Total departments that have own employees as paramedics 69%	50	
Total Departments that have contractual paramedics 33		46%

# APPENDIX C

# ANALYSIS OF RESPONSES TO SURVEY QUESTIONS THREE AND FOUR

Reasons contractual paramedics are used Percent	<u>Re</u>	sponde:	<u>nts</u>
Less expensive for contract service		28	85%
Better control over personnel		22	67%
Always the way it has been done	5		15%
No additional costs	4		12%
Contractual employees provide better service	3		9%
Never considered hiring own employees 3%		1	
	Respondents		
Problems encountered with contractual paramedics Percent	<u>Re</u>	sponde:	<u>nts</u>
<b>1</b>	<u>Re</u> 25	sponde 76%	<u>nts</u>
Percent			21%
Percent  High turnover rate	25		
Percent  High turnover rate  Small pool of candidates  Low firefighting or physical abilities	25	76%	

33 fire departments used contractual paramedics

# APPENDIX D

# ANALYSIS OF RESPONSES TO SURVEY QUESTIONS FIVE AND SIX

Reasons own employees as paramedics are used Percent	<u>Respondents</u>		
Better control over personnel		28	56%
Own employees provide better service	27	54%	
Always the way it has been done	25	50%	
Multi function employees	12	24%	
Never considered hiring contractual employees		11	22%
Private service prohibited by union contract		8	16%
bblems encountered with own paramedics Respondents reent			
Desire to drop paramedic certification	28	56%	
Expense of training and maintaining skills		24	48%
Rotation schedule from engine to ambulance		15	30%
Number of paramedics compared to calls		2	4%

50 fire departments used their own employees as paramedics